

Amendments to the Claims: This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims:

1. (Cancelled)

2. (Withdrawn) An optical display apparatus according to claim 1, wherein the light having the information of the object is object light which is obtained by irradiating the object with diffused light having passed through the slit.

3. (Withdrawn) An optical display apparatus according to claim 2, wherein the diffused light is formed by passing light through a ground glass.

4. (Currently Amended) An optical display apparatus, comprising a hologram device and a light source,

wherein the hologram device is a reflection-type hologram formed by:

light having information of an object incident on a first side of a first hologram dry plate; and

reference light incident on a second side of the first hologram dry plate, the second side of the first hologram dry plate being opposite the first side of the first hologram dry plate, the reference light and the light having the information of the object being arranged to interfere with each other on the first hologram dry plate,

wherein a reconstructed image of the object is displayed by light from the light source which is incident on the reflection-type hologram through an elongated opening which is elongated in the length or depth direction with respect to a viewer but not substantially elongated in the width direction with respect to a viewer, such that the visible zone of the reflection-type hologram is lengthened without blurring ~~arranged such that the light diffuses in only the width direction of the reflection-type hologram, and~~

wherein the light having the information of the object is obtained by reconstructing a transmission-type hologram which is formed by: object light incident on a second hologram dry plate, said object light obtained by irradiating the object which is positioned between a slit and the second hologram dry plate; and irradiation light incident on the second hologram dry plate with an incident optical path different from that of the object light.

5. (Original) An optical display apparatus according to claim 4, wherein the diffused light is formed by passing light through a ground glass.

6. (Currently Amended) An optical display apparatus, comprising a hologram device and a light source,

wherein the hologram device is a reflection-type hologram formed by:

light having information of an object incident on a first side of a first hologram dry plate; and

reference light incident on a second side of the first hologram dry plate, the second side of the first hologram dry plate being opposite the first side of the first hologram dry plate, the reference light and the light having the information of the object being arranged to interfere with each other on the first hologram dry plate,

wherein a reconstructed image of the object is displayed by light from the light source which is incident on the reflection-type hologram through an elongated opening which is elongated in the length or depth direction with respect to a viewer but not substantially elongated in the width direction with respect to a viewer, such that the visible zone of the reflection-type hologram is lengthened without blurring ~~arranged such that the light diffuses in only the width direction of the reflection-type hologram, and~~

wherein the light having the information of the object is obtained by reconstructing a transmission-type hologram through a slit adjacent to the transmission-type hologram on which an image of the object is recorded.

7. (Currently Amended) An optical display apparatus, comprising a hologram device and a light source,

wherein the hologram device is a reflection-type hologram formed by:

light having information of an object incident on a first side of a first hologram dry plate; and

reference light incident on a second side of the first hologram dry plate, the second side of the first hologram dry plate being opposite the first side of the first hologram dry plate, the reference light and the light having the information of the object being arranged to intercept with each other on the first hologram dry plate,

wherein a reconstructed image of the object is displayed by light from the light source which is incident on the reflection-type hologram through an elongated opening which is elongated in the length or depth direction with respect to a viewer but not substantially elongated in the width direction with respect to a viewer, such that the visible zone of the reflection-type hologram is lengthened without blurring ~~arranged such that the light diffuses in only the width direction of the reflection-type hologram, and~~

wherein the light having the information of the object is obtained by reconstructing a transmission-type hologram through a slit having an aperture adjacent to the transmission-type hologram on which an image of the object is recorded; and a cylindrical lens having its generatrix along a longitudinal direction of the aperture of the slit.

8. (Withdrawn) An optical display apparatus according to claim 1, wherein the reference light is provided by superposing a plurality of beams on one another in a direction orthogonal to a longitudinal direction of the slit.

9. (Withdrawn) An optical display apparatus according to claim 1, wherein the light source is a linear light source.

10. (Withdrawn) An optical display apparatus according to claim 9, wherein the linear light source is arranged on or in a vicinity of a plane orthogonal to a longitudinal direction of the slit.

11. (Withdrawn) An optical display apparatus according to claim 1, wherein an incident plane of the reference light is a plane orthogonal to a longitudinal direction of the slit.

12. (Withdrawn) An optical display apparatus according to claim 1, wherein an incident plane of the reference light is a plane different from a plane orthogonal to a longitudinal direction of the slit.

13. (Currently Amended) An optical display apparatus, comprising a hologram device and a light source,

wherein the hologram device is a reflection-type hologram formed by:

light having information of an object incident on a first side of a first hologram dry plate; and

reference light incident on a second side of the first hologram dry plate, the second side of the first hologram dry plate being opposite the first side of the first hologram dry

plate, the reference light and the light having the information of the object being arranged to interfere with each other on the first hologram dry plate, and

wherein a reconstructed image of the object is displayed by light from the light source which is incident on the reflection-type hologram through an elongated opening which is elongated in the length or depth direction with respect to a viewer but not substantially elongated in the width direction with respect to a viewer, such that the visible zone of the reflection-type hologram is lengthened without blurring ~~arranged such that the light diffuses in only the width direction of the reflection-type hologram.~~

14. (Withdrawn) An optical display apparatus according to claim 13, wherein the light having the information of the object is object light which is obtained by irradiating the object with the diffused light.

15. (Previously Presented) An optical display apparatus according to claim 13, wherein the light having the information of the object is reconstructed light obtained by reconstructing a transmission-type hologram which is formed by: object light obtained by irradiating the object with diffused light; and irradiation light having an incident optical path different from that of the object light.

16. (Original) An optical display apparatus according to claim 15, wherein the reference light is provided by superposing a plurality of beams on one another in a direction orthogonal to the direction in which the diffused light diffuses.

17. (Previously Presented) An optical display apparatus according to claim 13, wherein the light having the information of the object is obtained by reconstructing a transmission-type hologram through a slit adjacent to the transmission-type hologram on which an image of the object is recorded.

18. (Original) An optical display apparatus according to claim 17, wherein the reference light is provided by superposing a plurality of beams on one another in a direction orthogonal to the direction in which the diffused light diffuses.

19. (Withdrawn) An optical display apparatus according to claim 13, wherein the diffused light is formed by passing light through a lenticular lens.

20. (Withdrawn) An optical display apparatus according to claim 13, wherein the light source is a linear light source.

21. (Withdrawn) An optical display apparatus according to claim 20, wherein the linear light source is arranged on or in a vicinity of a plane orthogonal to the direction in which the diffused light diffuses.

22. (Withdrawn) An optical display apparatus according to claim 13, wherein an incident plane of the reference light is a plane orthogonal to the direction in which the diffused light diffuses.

23. (Withdrawn) An optical display apparatus according to claim 13, wherein an incident plane of the reference light is a plane different from a plane orthogonal to the direction in which the diffused light diffuses.

24. (Withdrawn) An optical display system having a plurality of display units arranged on an arrangement plane in which reconstructed images from the plurality of units are synthesized and displayed, wherein

each of the plurality of units is an optical display apparatus according to claim 1.

25. (Withdrawn) An optical display system having a plurality of display units arranged on an arrangement plane in which reconstructed images from the plurality of units are synthesized and displayed, wherein

each of the plurality of units is an optical display apparatus according to claim 13.

26. (Withdrawn) An optical display apparatus according to claim 1, wherein the hologram device is provided by combining a plurality of hologram elements with one another.

27. (Withdrawn) An optical display apparatus according to claim 13, wherein the hologram device is provided by combining a plurality of hologram elements with one another.

28. (Withdrawn) An optical display apparatus according to claim 1, wherein the hologram device is formed on a flexible substrate.

29. (Withdrawn) An optical display apparatus according to claim 13, wherein the hologram device is formed on a flexible substrate.

30. (Withdrawn) An optical display apparatus according to claim 1, wherein the hologram device is portable.

31. (Withdrawn) An optical display apparatus according to claim 13, wherein the hologram device is portable.

32. (Withdrawn) An optical display apparatus according to claim 1, wherein: the light source is a linear light source; and a length and an installation direction of the linear light source are set so that a predetermined reconstructed image viewing range is obtained.

33. (Withdrawn) An optical display apparatus according to claim 13, wherein: the light source is a linear light source; and a length and an installation direction of the linear light source are set so that a predetermined reconstructed image viewing range is obtained.

34. (Withdrawn) An optical display apparatus according to claim 1, wherein: the light source is a linear light source; and a position where a reconstructed image is formed is shifted by moving the linear light source out of an incident plane.

35. (Withdrawn) An optical display apparatus according to claim 13, wherein: the light source is a linear light source; and a position where a reconstructed image is formed is shifted by moving the linear light source out of an incident plane.

36. (Withdrawn) An optical display apparatus according to claim 1, comprising a plurality of the hologram devices, wherein the plurality of hologram devices are reconstructed by one light source.

37. (Withdrawn) An optical display apparatus according to claim 13, comprising a plurality of the hologram devices, wherein the plurality of hologram devices are reconstructed by one light source.

38. (Withdrawn) An optical display apparatus according to claim 1, wherein: the light source is a linear light source; and the linear light source is a fluorescent lamp or a combination of a fluorescent lamp and a reflecting plate.

39. (Withdrawn) An optical display apparatus according to claim 13, wherein: the light source is a linear light source; and the linear light source is a fluorescent lamp or a combination of a fluorescent lamp and a reflecting plate.

40. (Withdrawn) An optical display apparatus according to claim 1, wherein the light source is a linear light source comprising a polygon mirror and a point light source.

41. (Withdrawn) An optical display apparatus according to claim 13, wherein the light source is a linear light source comprising a polygon mirror and a point light source.

42. (Withdrawn) An optical display apparatus according to claim 1, wherein the light source is a linear light source comprising a cylindrical mirror and a point light source.

43. (Withdrawn) An optical display apparatus according to claim 13, wherein the light source is a linear light source comprising a cylindrical mirror and a point light source.

44. (Withdrawn) An optical display apparatus according to claim 1, wherein the light source is a linear light source configured by a light beam which is linearly focused by a mirror or a lens.

45. (Withdrawn) An optical display apparatus according to claim 13, wherein the light source is a linear light source configured by a light beam which is linearly focused by a mirror or a lens.

46. (Withdrawn) An optical display apparatus according to claim 1, wherein the light source is a linear light source comprising an array of a point light sources.

47. (Withdrawn) An optical display apparatus according to claim 13, wherein the light source is a linear light source comprising an array of a point light sources.

48. (Withdrawn) An optical display apparatus according to claim 1, wherein the light source is a linear light source configured by a bright line displayed on a two-dimensional display apparatus.

49. (Withdrawn) An optical display apparatus according to claim 13, wherein the light source is a linear light source configured by a bright line displayed on a two-dimensional display apparatus.

50. (Withdrawn) An optical display system, comprising an optical display apparatus and an information communication apparatus, wherein the optical display apparatus is an optical display apparatus according to claim 1.

51. (Withdrawn) An optical display system according to claim 50, wherein the optical display apparatus three-dimensionally displays a communication area of the information communication apparatus.

52. (Withdrawn) An optical display system according to claim 51, wherein a display area of the optical display apparatus and the communication area of the information communication apparatus match with each other.

53. (Withdrawn) An optical display system according to claim 50, wherein the information communication apparatus performs a one-way communication or an interactive communication of information.

54. (Withdrawn) An optical display system, comprising an optical display apparatus and an information communication apparatus, wherein the optical display apparatus is an optical display apparatus according to claim 13. ✓

55. (Withdrawn) An optical display system according to claim 54, wherein the optical display apparatus three-dimensionally displays a communication area of the information communication apparatus.

56. (Withdrawn) An optical display system according to claim 55, wherein a display area of the optical display apparatus and the communication area of the information communication apparatus match with each other.

57. (Withdrawn) An optical display system according to claim 54, wherein the information communication apparatus performs a one-way communication or an interactive communication of information.

58. (Withdrawn) An optical display apparatus, comprising an image display apparatus, an imaging optical system and a hologram screen, wherein:

the hologram screen is arranged to reflect light from a point light source so as to form a point image at a position different from the point light source; and

the imaging optical system is arranged to adjust a focus in a vertical direction of an image displayed on the image display apparatus to coincide with the hologram screen.

59. (Withdrawn) An optical display apparatus according to claim 58, wherein the formed point image is a real image.

60. (Withdrawn) An optical display apparatus according to claim 58, wherein the formed point image is a false image formed at a position on a opposite side of the point light source with respect to the hologram screen.

61. (Withdrawn) An optical display apparatus according to claim 58, wherein:

the imaging optical system has independent imaging functions in a vertical direction and in a lateral direction;

for the vertical direction, a focus in the vertical direction of an image displayed on the image display apparatus is adjusted to coincide with the hologram screen; and

for the lateral direction, a focal distance is arranged to be variable.

62. (Cancelled)

63. (Withdrawn) An optical display system having a plurality of display units arranged in a lateral direction, wherein each of the plurality of display units is an optical display apparatus according to claim 58.

64. (Withdrawn) An optical display system having a plurality of display units arranged in a depth direction, wherein each of the plurality of display units is an optical display apparatus according to claim 58.

65. (Withdrawn) An optical display system according to claim 58, wherein the image display apparatus includes: a display device selected from an LED, a CRT, a polymer dispersed type liquid crystal panel and an organic EL panel; and a polarization switching device.

66. (Withdrawn) An optical display system according to claim 65, wherein the polarization switching device includes a ferroelectric liquid crystal panel.

67. (Withdrawn) An optical display apparatus according to claim 65, further comprising polarization glasses whose polarization transmission directions for respective eyes are orthogonal to each other.